

oxide layer (13) on whose surface there is arranged a ring structure (20) having a surface conductivity different from that of the rest of the surface of the oxide layer (13).

2. (Currently Amended) The Ssensor of ~~according to~~ claim 1, ~~wherein~~ characterized in that additionally surface profiling is provided, with elevations (7) and depressions (12), between the guard ring (1) and the channel region (4).

3. (Currently Amended) The Ssensor ~~according to~~ of claim 2, ~~wherein~~ characterized in that the ring structure (20) is applied by deposition on a surface (15) between an insulating thin layer (13) on the channel region and the guard ring (1).

4. (Currently Amended) The Ssensor ~~according to~~ of claim 2 or 3, ~~wherein~~ characterized in that the ring structure (20) ~~are~~ is applied as an insulating material on one or a plurality of insulator layers, preferably thick oxide layers (14).

5. (Currently Amended) The Ssensor of ~~according to one of~~ claims 2 to 4, ~~wherein~~ characterized in that the ring structure (20) is fashioned at least substantially concentrically between the channel region (4) and the guard ring (1).

6. (Currently Amended) The Ssensor of claim 2, ~~according to one of the foregoing claims,~~ characterized in that ~~wherein~~ the ring structure (20) is made of aluminum or an aluminum-copper alloy.

7.(Currently Amended)- The Ssensor of claim 2, according to one of the foregoing claims,
characterized in that wherein the sensitive gate layer comprises is a gas-sensitive gate layer (8).

8.(Currently Amended) The Ssensor of claim 7, wherein according to one of the foregoing
claims, characterized in that the field-effect transistor formed from the source (2) and the drain (3) is
spatially separated from the air gap (10) between the gate layer (8) and the channel region (4), the
gate (12) of the field-effect transistor being led via an electrode (19) into the channel region (4).

9.(Currently Amended) The Ssensor of according to claim 2, characterized in that wherein the
elevations (7) simultaneously form the ring structure (20).